

Amendments to the Specification

Please amend the specification as follows:

(New paragraph between paragraphs 21 and 22):

“p21-a Fig. 8 is a block diagram of a general purpose computer system for practicing the present invention.”

Applicants respectfully submit that the above amendment was present in the RCE filed 7/6/2006 and request that the objection be withdrawn.

“p31” “Where the parameters C1, C2 and Rload are constants, provided by the caller. V2 in the above equation ~~starts~~ is equal to Vout at the beginning of simulation.”

“p38” “The first step is to take the detailed, original circuit to be modeled, and, in the SPICE-like simulator, connect ideal grounded voltage sources to all input and output pins. The next step is to monitor the current flowing through those voltage sources. Additionally, one connects the zero-valued voltage sources between ground and the common, formerly grounded node of the devices, and another such zero-valued voltage source between the supply rail and the formerly Vdd connected device terminals. These will allow one to monitor the ground (I_{gnd}) and Vdd currents (I_{vdd}). This setup is shown in FIG. 4. The next step is to select the range that each voltage source will scan across, which should cover the voltage range over which one hopes to simulate, commonly from slightly below ground to slightly above Vdd. One then selects how to sample across all these ranges, the simplest method being to uniformly step across the selected range for each pin, in nested loops, one loop per pin. In each instance of a selection of pin voltages, ~~The user~~ the user measures the steady state current flowing into/out of the pins. This provides the I_p and I_n currents, at that set of pin voltages, since the following equations apply:”

“p46” “The details and structure of the internal impedance labeled Zint can also change without

fundamentally changing the nature of the ODE, or the solution method. Whatever implementation of Zint is chosen, the current flowing into Zint, namely $I(Zint)$, can change continuously as a function of time, and may therefore be different at every time point. Consequently, one or more additional equations will enter into the solution of the ODE, and the current $I(Zint)$ will be given by the solution to these equations. For example, if the topology chosen for Zint were a pi-model, there would need to be a pair of equations similar to 2a and 2b whose simultaneous solution yielded the current $I(Zint)$ at every ODE-solution time step. Thus the choice of a model for Zint will affect the specific form of the ODE by introducing ancillary equations to be solved, but does not change the basic method of the invention. For many modeled circuits, it has proven unnecessary to have any internal impedance model. Having no internal impedance in the model is equivalent to $I(Zint) = 0$, i.e. the current drawn by the internal impedance is identically zero ($I(Zint)=0$)."

"p79" "An API is a set of elementary, building-block functions (i.e. function calls, or calls) which perform various operations. In the case of the simulator's API, these functions include, for example, adding a transistor, capacitor or resistor to a circuit, applying voltage signals to pins, current through elements, retrieving voltage or current signals from elements, etc. The simulator API is a used to construct (define), simulate, and determine parameters, functionality, and response of a circuit. "

In regards to "p80" Applicants respectfully submit that the term "circuit module 25" was replaced with "code module 25" in the replacement drawings filed 7/6/06, which were subsequently accepted by the Examiner (see page 4 of the 10/16/06 Office Action). Therefore, it is requested that the objection be withdrawn.

~~"p975"~~ "p95 // Power level B:"